

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for carrying outtreating a surface of a substrate in
a plasma enhanced process, the device comprising:
within a vacuum chamber, and
arranged in the vacuum chamber, a magnetron electrode (32), a positioning
meanssubstrate support (26), and a gas supply meansgas supply lines (33),
wherein the magnetron electrode comprisingis of the unbalanced type and
comprisesa flat magnetron face (20) with peripheral and central magnetic poles of
opposite polarities and further comprising means for producing a high frequency
alternating electric fieldan electrode piece (21) being powered by a high frequency
alternating voltage,
wherein the positioning meanssubstrate support (26) beingis electrically
grounded or floating or negatively biased and equipped for positioning atthe
substrate (25) with a surface to be treated facing the magnetron face (20) at a
distance thereof, and
wherein the gas supply meansbeinggas supply lines (33) are equipped for
supplying a process gas or process gas mixture to the space between the
magnetron face (20) and the surface to be treatedof the substrate positioned on the

substrate support, and

wherein the magnetron electrode (32) is of the unbalanced type and that a distance between the magnetron face (20) and the ~~positioning means~~substrate support (26) is adapted to the magnetic field created by the magnetron electrode (32) such that there is a visible plasma band running between darker tunnels (11) formed by magnetic field lines (10) extending between peripheral and central magnetic poles of the magnetron face (20) and the surface to be treated, the plasma band having a minimum width but having towards the surface to be treated a homogeneous brightness.

2. (Previously Presented) The device according to claim 1, wherein a distance (A-C) between the surface to be treated and the magnetron face (20) is at least 2% larger than a visible height (A-B) of the tunnels (11).

3. (Previously Presented) The device according to claim 1, wherein a distance (A-C) between the surface to be treated and the magnetron face (20) is at the most 20% larger than a visible height (A-B) of the tunnels (11).

4. (Previously Presented) The device according to claim 1, wherein a magnetic strength of the central magnetic pole of the magnetron face (20) is about half of a magnetic strength of the peripheral pole.

5. (Previously Presented) The device according to claim 1, wherein the magnetron electrode (32) comprises an electrode element (21) being connected to a source of

an alternating voltage (34).

6. (Currently Amended) The device according to claim 5, wherein the ~~positioning means~~substrate support and/or the substrate (25) are arranged to be electrically grounded, electrically floating or negatively biased.

7. (Currently Amended) The device according to claim 1, wherein the ~~positioning means~~substrate support is a rotating drum (30) and wherein a plurality of magnetron electrodes (32) having rectangular faces being arranged with their length parallel to the rotation axis of the drum (30) are arranged around part of a circumference of the drum (30).

8. (Currently Amended) The device according to claim 7, wherein the ~~gas supply means~~comprises gas supply lines (33) ~~extending~~extend parallel to the drum axis between the magnetron faces (20).

9. (Previously Presented) The device according to claim 7, wherein each of the plurality of magnetrons (32) is connected to a separate power supply.

10. (Withdrawn) Use of the device according to claim 1 for carrying out a plasma enhanced chemical vapour deposition process.

11. (Withdrawn) Use of the device according to claim 1 for depositing silicon oxide using a process gas comprising an organosilicon compound and oxygen.

12. (Withdrawn) Use according to claim 11, wherein the substrate is a web of polymer film material being coated so as to improve barrier properties of said web of polymer film material.